

C. Remarks

The claims are 1-4 and 6-12, with claims 1 and 12 being independent.

Claims 5 and 21 have been cancelled without prejudice or disclaimer. Claims 1 and 12 have been amended to clarify the invention by incorporating the limitations of cancelled claims 5 and 21. Specifically, claims 1 and 12 have been amended to more clearly point out the distinguishing features of the present invention. Support for the amendments can be found throughout the application as originally filed, e.g., at page 4, lines 1-23; page 6, lines 7-13; page 12, line 25 through page 13, line 4; page 16, line 4 through page 17, line 27; and page 18, line 10 through page 19, line 12. Applicants submit that no new matter has been added. Reconsideration of the present claims is respectfully requested.

Claims 1-12 and 21 stand rejected under 35 U.S.C. §103(a) as being obvious over Kikuta (U.S. Patent No. 5,927,874) in view of Oda (U.S. Patent No. 5,838,888). Applicants respectfully traverse this rejection.

One of the key features of the presently claimed invention is the control of the data shift. According to the present claims, data is shifted based on a distance over which the printing medium is transported after the scan, a flag indicating status of use provided for each area of said print buffer, and an extent of the printing elements used for printing in next scan. Data shift in this way makes it possible to print at the optimum printhead position of use made to conform to the amount of transport of the printing paper.

As noted by the Examiner, Kikuta does not address control of the data shift; Oda does not sufficiently remedy that deficiency. Generally speaking, in a printer having a plurality of printing elements arranged in a paper feeding direction, recording data is finally shifted in the paper feed direction to be supplied to each of the plurality of the printing

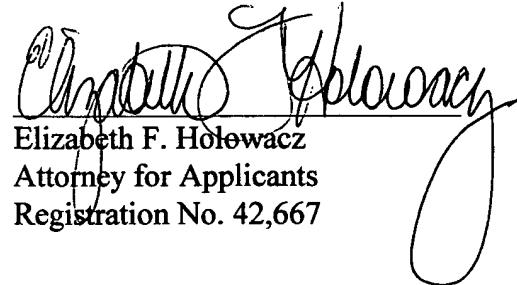
elements as in Oda. More specifically, Oda discloses a recording apparatus wherein a distribution processing is introduced in order to shorten signal processing time for the printing data supplied from a print buffer 18 to a print head driver 19. Oda does not discuss the control of the data shift. In particular, Oda does not disclose or suggest setting the amount of shift based on a distance over which the printing medium is transported after the scan, a flag indicating status of use provided for each area of said print buffer, and an extent of the printing elements used for printing in a next scan. Accordingly, a printing apparatus made using the teachings of Oda would not enjoy the benefits of the presently claimed printing apparatus (or printing method).

In sum, it is clear that the present invention is not rendered obvious by the cited references, whether considered alone or in combination. There is simply no disclosure of at least one of the key feature of the present invention, namely the claimed data shift control. Accordingly, Applicants respectfully request withdrawal of the §103 rejection.

This Amendment After Final Rejection is believed clearly to place this application in condition for allowance. Its entry is therefore believed proper under 37 C.F.R. §1.116. Accordingly, entry of this Amendment After Final Rejection, as an earnest attempt to advance prosecution, is respectfully requested. Should the Examiner believe that issues remain outstanding, the Examiner is respectfully requested to contact Applicant's undersigned attorney in an effort to resolve such issues and advance the case to issue.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

  
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